

the fitting 52 relative to the plate 60, so that it also is fixed in location and cannot move or slide. In turn, that anchors the support structure for the bent syringe needle 51. That in turn provides the necessary anchoring and alignment so that the two syringe needles are parallel to each other.

Returning to FIG. 2 of the drawings, the bolts 68 extend upwardly so that a laterally projecting tab 72 at the lower marginal edge of the bracket 60 is also included. This member 72, better shown in FIG. 4 of the drawings, assures alignment of the L-shaped syringe needle.

Going now to FIG. 3 of the drawings, this view perhaps adds a measure of clarity to the construction just mentioned which shows how the return syringe 51 is fixed and anchored in place. More importantly, it also shows the construction by which the syringe needle 51 is aligned with the circular collar 65 which positions over the neck of the bottle. Last of all, it also shows how the mounting bracket 60 supports and holds all of this equipment in proper alignment above the sample container 25. For the benefit of the operator, the face is imprinted with the appropriate operative legends, and a handle 75 is provided for the valve. The handle is mounted so that it is easily grasped by the user.

#### AN EXAMPLE OF OPERATION

Assume that the portable apparatus 20 of this disclosure is used to obtain a sample of an unknown liquid in the tank. The equipment is shown in FIG. 3 of the drawings in the fashion suggesting that several sample bottles can be carried with the cabinet. In any event, the portable equipment 20 is moved to the necessary location and the sample line 18 is made fast through the appropriate connector 14. Likewise, the return line 19 is connected. Once these connections are made, the next step is to remove the cap or lid from the sample container 25 and slide the sample container 25 upwardly so that the neck of the bottle is engaged by the circular collar 65 for alignment purposes. This automatically punctures the septum with both needles, and both needles are inserted into the container 25. By hand, the user then operates the pump 21 previously mentioned, cranking the pump for several turns. Before pumping is started, the valve is switched to the circulate position. This is the flow path illustrated in FIG. 1 of the drawings. Fluid flows in this path so that the line 18 is purged. The gas resident in the various lines and container 25 before starting is forced out of the lines and is removed by delivery through the return line 19. After operating the equipment for a few strokes on the pump, perhaps 10 revolutions or so, the operator can then switch the valve from the circulate position to the sample position, the sample is then introduced into the container 25. Indeed, this ability to control the valve and provide bypass fluid flow enables the operator to assure that an appropriate sample is obtained. Continued pumping after the sample has been obtained is also desirable to restore the fluid in lines back to the container 11. That is to say, the recirculation position is used to assure that the lines are properly purged, the right volume of sample is delivered to the container, and the sample is placed in the container 25. The pump can be rotated in the opposite direction to clear the liner by return flow.

After the sample has been removed and placed into the container 25, the container can be quickly disconnected simply by pulling it downwardly, relatively pulling away from the two syringe needle tips, and then

the container 25 is recapped for safety sake. Another sample container can be filled again in the same fashion or for different reasons.

After completing the sample collection routine, the lines 18 and 19 can then be disconnected and stored so that the equipment 20 can be carried to another location. It is relatively light weight, especially in light of the construction of the valve mounting mechanism detailed in FIGS. 2 and 4. It is also relatively inexpensive in light of this type of fabrication.

While the foregoing is directed to the preferred embodiment, the scope is determined by the claims which follow:

I claim:

1. A portable system for use in obtaining a sample from a closed tank containing a gas or liquid therein wherein the portable system cooperates with the tank and comprises:
  - (a) inlet and outlet lines connected through a pumping means for removing a sample from the tank flowing through the pumping means and circulating through the lines resulting from said pumping means operation;
  - (b) valve connected with said inlet and outlet lines and pumping means wherein said valve has an inlet port and two outlet ports, one of the outlet ports defining an input for a bypass line;
  - (c) a pair of elongate, extending syringe needles having tips located in near proximity to enable the tips to puncture and enter through a septum over a sample receiving container;
  - (d) means for connecting said valve with one of said needles to support said needle and define a fluid flow path from said valve through said one of said needles for communication with the sample receiving container and further including support means fixedly holding said needle tips in fixed spatial relationship within said container, said support means enabling said needles to be supported externally of said container prior to insertion through the septum of the container; and
  - (e) said support means comprises a bracket mounting said valve aligned over one of said needles to enable said container to be filled through said valve wherein said bracket comprises a pair of spaced plates capturing therebetween a fitting for the second of said needles.
2. The system of claim 1 wherein said pair of plates comprises bolt supported and spaced apart parallel plates supporting said valve, and said first needle extends through said plates.
3. The system of claim 1 wherein said bracket supports a downwardly directed, circular, container alignment means for temporary engagement with said container.
4. The system of claim 1 further including an upstanding front panel supporting a control for said valve.
5. The system of claim 4 including a valve body mounted on said front panel and having a bottom located outlet port and a fitting connected to said outlet port and then to said first needle.
6. The system of claim 5 wherein said first needle is connected by an "industry standard" fitting so that flow is directed downwardly through said needle and valve.
7. The system of claim 6 wherein said first needle is mounted solely on said fitting and extends through a pair of plates below said valve body.